

WHAT IS CLAIMED IS:

1. An LED lamp comprising:

a substrate coated with a metal pattern formed as an electrically conducting portion including films of copper (Cu), nickel (Ni) and gold (Au) laminated successively in this order on the substrate;

a resin frame member fixed onto the substrate through an adhesive agent;

a light-emitting element fixed into a frame of the resin frame member on the substrate so as to be electrically connected to the metal pattern;

a resist bonded onto a nickel-free or gold-free surface of the copper film of the metal pattern to form such a structure that the resist is at least partially put between the substrate and the resin frame member; and

a light-transmissive resin packed in the frame of the resin frame member to seal the light-emitting element with the light-transmissive resin.

2. An LED lamp according to Claim 1, wherein an inner edge of the resist held between the resin frame member and the substrate is visible from the edge of the through-hole of the resin frame member.

3. An LED lamp according to Claim 1, wherein the resist

is shaped like a ring.

4. A method of manufacturing an LED lamp, comprising steps of:

coating a substrate with a copper film which is provided as a lowermost layer of a metal pattern electrically connected to a light-emitting element;

bonding a resist onto the copper film so that the resist encircles the circumference of a position where the light-emitting element will be mounted;

forming a nickel film on the copper film and further forming a gold film on the nickel film to thereby complete the metal pattern;

bonding a resin frame member onto the substrate through a layer of an adhesive agent so that the resist is at least partially put between the substrate and the resin frame member while the resin frame member encircles the circumference of the position where the light-emitting element will be mounted;

mounting the light-emitting element on the metal pattern while electrically connecting the light-emitting element to the metal pattern; and

packing a light-transmissive resin in a frame of the resin frame member to seal the light-emitting element with the light-transmissive resin.

5. A method of manufacturing an LED lamp according to Claim 4, wherein the resist is shaped like a ring.